

REMARKS

Claims 1-9 and 12-13 are now pending in the application. Claim 12 has been amended to correct a typographical error. The Examiner is respectfully requested to reconsider and withdraw the rejection in view of the remarks contained herein

Rejection Under 35 U.S.C. § 102

Claims 1-9 and 12-13 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Sako et al. (U.S. Pat. No. 4,819,236). This rejection is respectfully traversed.

With regard to claim 1, Sako et al. fail to show, teach, or suggest, inter alia, frequency up-converting said retrieved digital transmission signal to produce said reference transmission signal. As best understood by Applicants, Sako et al. disclose a data transmission method to store data on a disc shaped recording medium. A rectangular array is formed for a block of data containing n words. The array also includes supplementary data necessary to transmit the n words of data (e.g., transmission rate information) and an error detecting code to detect possible errors that may occur in the block of data and the supplementary data.

The Examiner cites col. 7, line 54 through col. 8, line 35 as disclosing frequency up-converting said retrieved digital transmission signal to produce said reference transmission signal. However, this portion merely discloses an apparatus for recording and reproducing product coded data (e.g., the rectangular array) on a disc shaped recording medium (11). When recording the product coded data, an encoder (34) receives input data (31A, 31D) and transmission rate information (e.g., the rate at which the input data is received). The encoder (34) encodes the input data and the transmission rate information. A recording means (35) modulates the encoded data. The modulated encoded data is subsequently stored on the disc (11). More specifically, the transmission rate portion of the data is stored on the disc (11) as supplementary data (SUPD) to provide transmission rate information when the disc (11) is being read.

The apparatus also includes a driving motor (21) to rotate the disc (11) and a feedback control loop (elements 22, 23, 24, and 25). The feedback control loop controls the motor (21) based on a reference speed signal and a feedback frequency signal. The reference speed signal is based on the transmission rate information stored on the disc (11). The feedback frequency

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signal represents the rotational speed of the motor (21). The feedback control loop includes a phase comparator (23) that compares the feedback frequency signal and the reference speed signal. The phase comparator (23) generates an output signal representing a difference between the phase of the feedback frequency signal and the reference speed signal. The feedback control loop uses the phase difference to control the motor (21) to rotate synchronously with the transmission rate of the input data.

When reproducing (reading) the product coded data, a reproducing means (41) demodulates the modulated data stored on the disc (11). A supplemental decoder (46) receives the demodulated data and decodes the transmission rate information stored on the disc (11). The feedback control loop (elements 22, 23, 24, and 25) controls the drive motor (11) based on a playback reference speed signal, which is based on the transmission rate information stored on the disc (11). In this manner, the feedback control loop controls the motor (21) to rotate synchronously with transmission rate of the information stored on the disc (11).

The Examiner contends that the data retrieved (the transmission rate information stored on the disc 11) to produce a reference transmission signal is generated according to a certain transmission rate (i.e., the transmission rate information stored on the disc 11). This transmission rate, according to the Examiner, can be of a higher frequency and can also be manually changed to a higher frequency. Therefore, according to the Examiner, the retrieved data is frequency up-converted to produce the reference transmission signal. Applicants respectfully disagree, according to Sako et al., the rate at which the motor (21) rotates must be synchronous with the transmission rate of the input data stored on the disc (11). Accordingly, the reference transmission signal is dictated by the transmission rate information stored on the disc (11) and not varied as suggested by the Examiner.

Sako et al. does suggest that if the transmission rate information is known (e.g., predetermined), it can be stored in memory and manually set to correspond to the transmission rate of the disc (11) rather than by using the supplementary decoder (46) to extract the transmission rate information stored on the disc (11). However, the reference transmission signal is still dictated by the transmission rate information stored on the disc (11) to ensure that the motor (21) rotates synchronously with transmission rate of the information stored on the disc (11). Accordingly, Applicants can find no mention of frequency up-converting said retrieved

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digital transmission signal to produce said reference transmission signal in the cited portions of Sako et al. Therefore, reconsideration and withdrawal of the rejection of claim 1 is respectfully requested.

Claim 12 is allowable for at least similar reasons as claim 1. Therefore, reconsideration and withdrawal of the rejection of claim 12 is respectfully requested.

Claims 2-9 and 13 each ultimately depend on claims 1 and 12, respectively, and are allowable for at least similar reasons. Claims 2-9 and 13 are also believed to be allowable for having novel and non-obvious subject matter. Therefore, reconsideration and withdrawal of the rejection of claim 2-9 and 13 is respectfully requested.

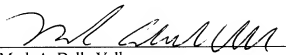
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CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action and the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (312) 609-7500.

Respectfully submitted,
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